

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

FILED

FEB 8 2005

JUDGE HARRY D. LEINENWEBER
U.S. DISTRICT COURT JUDGE

CFM CORPORATION,

Plaintiff,

Case No. 02 C 1981

v.

Hon. Harry D. Leinenweber

DIMPLEX NORTH AMERICA LTD.,

Defendant.

MEMORANDUM OPINION AND ORDER

Plaintiff CFM Corporation (hereinafter, "CFM") filed suit for declaratory judgment of non-infringement, invalidity, and unenforceability against Defendant Dimplex North America Ltd. (hereinafter, "Dimplex") over its U.S. Patent No. 5,642,580 ("the '580 patent" or "'580"). Dimplex's counterclaim accuses CFM of infringement. Dimplex filed a Motion for Partial Summary Judgment of infringement of Claim 1 of the '580 patent on all of CFM products listed in the pleadings, including the HES 30, HES 40, HEF 33, DEF 33, DEF 36, DEF 36 NH, and the Addison and Saratoga stoves (the "Accused Products"), and for inequitable conduct. CFM filed a Motion for Summary Judgment of invalidity, specifically for lack of novelty (anticipation) under 35 U.S.C. § 112(b), and moves to strike certain evidence.

For the reasons stated herein, Dimplex's motion for partial summary judgment of infringement and inequitable conduct is denied in part and granted in part. CFM's motion for summary judgment of

invalidity is denied. CFM's evidentiary objections are denied as moot.

I. BACKGROUND

The parties are Canadian corporations that make electric fireplaces. Dimplex is the owner by assignment of the '580 patent entitled "Flame Simulating Assembly." The '580 patent was issued in July 1997 and covers aspects of an electric fireplace. The types of electric fireplaces and stoves at issue are relatively mobile structures that use mechanical means to create an overall visual impression of a fire. Several patented versions of these types of fireplaces are available in the U.S. market, some more realistic in appearance than others. All the Accused Products are sold in the U.S. market.

On January 7, 2003, the Court entered a protective order in this case that outlined guidelines for treatment of confidential information. Pursuant to that Order, the parties' briefs, 56.1 statements, supporting affidavits, and other evidence filed in connection with these motions remain under seal. On April 22, 2004, the Court issued a Claim Construction Order (the "Claim Construction") construing certain disputed claim limitations of claim 1. CFM Corp. v. Dimplex North Am. Ltd., No. 02 C 1981, 2004 WL 887412 (N.D. Ill. Apr. 22, 2004) ("Markman Order").

II. SUMMARY JUDGMENT

Summary judgment is appropriate when "the pleadings, depositions, answers to interrogatories, and admissions on file,

together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." FED. R. CIV. P. 56(c). A genuine issue of triable fact exists only if "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Pugh v. City of Attica*, 259 F.3d 619, 624 (7th Cir. 2001) (quoting *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248, 106 S.Ct. 2505, 2510, 91 L.Ed.2d 202 (1986)).

III. PATENT INFRINGEMENT

Determining patent infringement is a two-step process in which the Court first construes the claims. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc). The fact finder then compares the construed claims to the accused device to determine, as a question of fact, whether all of the claim limitations are present in the accused device. *Id.* at 1454; *Int'l Rectifier Corp. v. IXYS Corp.*, 361 F.3d 1363, 1369 (Fed. Cir. 2004).

Summary judgment on the issue of literal infringement is proper "'when no genuine issue of material fact exists, in particular, when no reasonable jury could find that every limitation recited in the properly construed claim either is or is not found in the accused device.'" *Goldenberg v. Cytogen, Inc.*, 373 F.3d 1158, 1163-64 (Fed. Cir. 2004) (quoting *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998)). For literal infringement, every limitation of claim 1 of the '580 patent must

read on the accused device exactly. *Johnston v. IVAC Corp.*, 885 F.2d 1574, 1579 (Fed. Cir. 1989). The patentee bears the ultimate burden of proving patent infringement. See *Vivid Tech., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 807 (Fed. Cir. 1999).

Dimplex's infringement motion concerns Claim 1 of the '580 patent. Claim 1 recites:

A flame simulating assembly comprising:

a light source;

a flame effect element having means for transmitting light from said light source to produce a moving flame effect;

at least one flicker element having at least one reflective surface, said flicker element being positioned intermediate of said light source and said flame effect element to reflect light from said light source for subsequent transmission by said flame effect element;

a screen having a partially reflecting surface and a diffusing surface, said flame effect element extending proximate to said diffusing surface wherein said transmitted light produces an image on the screen which resembles moving flames;

and a simulated fuel bed positioned adjacent to said partially reflecting surface wherein an image of the fuel bed is displayed on the screen and wherein the image of moving flames appears to emanate between the simulated fuel bed and its image in the screen.

The Court construed disputed Claim 1 language in its Claim Construction as follows:

A "flame effect having means for transmitting light from said light source to produce a moving flame effect" as construed reads "a

stationary or mobile component made of light-weight material that contains openings for transmitting light to produce an impression of moving flames."

A "flicker element having at least one reflective surface" as construed reads "a component part having at least one surface that reflects light in a wavering motion."

"[A] screen having a partially reflecting surface and a diffusing surface" as construed reads "a screen having a surface that partially bends light or gives back an image and also having a surface that disperses and softens light."

"[A]n image . . . which resembles moving flames" and "an image which resembles moving gasses" from claims 1 and 30 as construed reads "a representation that gives the appearance of moving flames" and "a representation that gives the appearance of moving gasses from a fire."

(See Markman Order).

A. Means-Plus-Function Claim Construction

As discussed in the Court's Claim Construction (see Markman Order at 4-5) a portion of claim 1 is written in a means-plus-function format. Literal infringement of a 35 U.S.C. § 112, ¶ 6 claim requires that the relevant structure in the accused device perform the identical function recited in the means-plus-function clause. See *Ishida Co., Ltd. v. Taylor*, 221 F.3d 1310, 1316-17 (Fed. Cir. 2000). If it performs the identical function, then the accused device must also be identical or equivalent to the corresponding structure in the specification. Lockheed Martin

Corp. v. Space Systems/Loral, Inc., 324 F.3d 1308, 1320 (Fed. Cir. 2003).

The means-plus-function claim as construed requires "a stationary or mobile component made of light-weight material that contains openings for transmitting light to produce an impression of moving flames." (Markman Order at 9). The parties disagree as to whether the Accused Products' flame effect structures are "light-weight" as required by the Court's Claim Construction and thus necessary to literally read on to claim 1 for infringement. Rather than being a material factual dispute most appropriate for the jury, the parties' dispute focuses in part on the Court's construction of this limitation. Before turning to the infringement analysis, the Court will first address its original intent during the construction of the structural flame effect limitation of claim 1. See *Utah Med. Prods., Inc. v. Graphic Controls Corp.*, 350 F.3d 1376, 1382 (Fed. Cir. 2003) (stating that it was not error for the district court to revise its claim construction to clarify its original intent).

The Court construed the function of the means-plus-function limitation as "transmitting light from said light source." (Markman Order at 7). The Court explained that the clause "'to produce moving effect' merely states the ultimate desired result of the limitation in the claim . . . and therefore 'adds nothing to the substance of the claim.'" *Id.* (quoting *Tex. Instruments, Inc. v. U.S. Int'l Trade Comm'n*, 988 F.2d 1165, 1172 (Fed. Cir. 1993)).

Referring to the patent's specification, the corresponding flame effect structure should properly be construed as "a stationary or mobile component made of material that contains openings for transmitting light to produce an impression of moving flames." See *Cardiac Pacemaker v. St. Jude Med.*, 296 F.3d 1106, 113 (Fed. Cir. 2002) (explaining that in a § 112, ¶ 6 claim, the Court must determine the claim limitation's structure, if any, using the patent specification).

Dimplex argues correctly that under the Court's construction, the material does not need to "ripple, billow, or otherwise move" for the flame effect to literally read on the means-plus-function limitation of claim 1. In the specification, "a single thin sheet of a light-weight, substantially opaque, material such as polyester" refers to the preferred embodiment of the flame effect structure so that the structure itself can move to aid in producing "a moving flame effect." See U.S. Patent No. 5,642,580, col. 4, ll. 8-9. The patent specification also discloses that a moving flame effect can be produced by use of the flicker element alone "without the flame effect element," although this is not the best means in producing a "realistic effect." *Id.* col. 5, ll. 25-31.

The corresponding structure to a function set forth in a means-plus-function limitation "must be necessary to perform the claimed function." See *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1321 (Fed. Cir. 2003) (emphasis added). The "light-weight" term originally read into the structure as part of the means is not

necessary to accomplish the limitation's function - "transmitting light from said light source." Accordingly, the Court amends its earlier Claim Construction to eliminate the term "light-weight" from the above described limitation. The clause now reads: "a stationary or mobile component made of material that contains openings for transmitting light to produce an impression of moving flames."

B. Infringement Analysis

1. "Light Source"

Neither party disputes that the Accused Products all have a light source as required under claim 1.

2. "[A] stationary or mobile component made of material that contains openings for transmitting light to produce an impression of moving flames."

CFM fails to raise a genuine issue of material fact as to the function of the flame effect element. Neither party points to evidence in the record that disputes that the Accused Products all have a flame effect structure that functions to "transmit[] light from said light source." Accordingly, the Accused Products perform the function of transmitting light as required by Claim 1. "If the identical function is performed, the next step is to determine whether the accused device uses the same structure . . . found in the specification, or [its] equivalents." *IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1430 (Fed. Cir. 2000).

The evidence submitted by CFM in its opposition essentially concedes the existence of the corresponding structure in the

Accused Products. See Utah Med. Prods., Inc., 350 F.3d at 1383 ("To qualify as an equivalent of the structure disclosed in the specification under § 122, ¶ 6, the structure of the accused device c[an] have no more than insubstantial differences from" the patented structure.). CFM submitted evidence that the flame effect elements in the Accused Products are single 24 gauge dark metal sheets weighing approximately 3 lbs. 3 ounces that contain multiple openings for the transmission of light. CFM indicates that some of the Accused Products' flame effect elements vary slightly in weight and size. This fact, however, is not material to the claim limitation at issue.

CFM focuses its contention that a disputed issue of fact exists as to this limitation wholly on the term "light-weight." Because the Court has refined its earlier construction to eliminate this term, there is no genuine or material issues of fact regarding this limitation. Accordingly, the Court finds that the Accused Products' flame effect elements literally read on '580's means-plus-function clause - "a stationary or mobile component made of material that contains openings for transmitting light to produce an impression of moving flames."

3. Issues of Fact

As the Court discussed earlier, Dimplex moves for summary judgement of infringement on all Accused Products listed in the pleadings. CFM contends that Dimplex has failed to demonstrate that there are no genuine issues of fact that all of the Accused

Products read on every element of Claim 1. After a thorough review of the parties' briefs and supporting documentation, the Court agrees with CFM on this point. To support its infringement motion, Dimplex must demonstrate that the Accused Products read on each limitation in Claim 1 of the '580 patent.

First, Dimplex does not point to undisputed evidentiary support to indicate that all the Accused Products are substantially similar to each other and can thus be deemed interchangeable for purposes of comparison to Claim 1. Second, from the parties' references to the record, the Court cannot determine, with any certainty, which Accused Products are referenced in connection with each element. Therefore, the Court cannot properly decipher if specific Accused Products literally infringe or raise disputed questions of fact.

Dimplex cites to testimony specific to Claim 1's elements where at least one and sometimes several of the Accused Products are referenced. These references are rarely clear as to which products the expert or other evidence specifically rely upon. For example, often the references are to exhibit numbers, which refer to a specific Accused Product. The Court is not entirely clear as to which Accused Product or Products matches with each exhibit number or other reference. Also, other testimonial evidence does not include enough context to clearly indicate which products the experts and other witnesses have actually reviewed. General statements such as "some" or "several" in reference to the Accused

Products do not provide unambiguous guidance when deciding a summary judgment motion. Dimplex provides manuals and pictures for some of the Accused Products, but again does not demonstrate that these diagrams are representative of the other accused products in suit.

The Court concludes that the parties' would benefit from trial where each party can bring forth systematic evidence to demonstrate that each product either does or does not read on each limitation to Claim one and the other claims at issue. The Court finds that the resolution of the infringement issue must await trial. Dimplex's Motion for Summary Judgment of Infringement is therefore **DENIED.**

IV. INVALIDITY

CFM moves for summary judgment of invalidity on Claims 1 and 30 of the '580 patent and their dependent claims. Claims 5, 7, 13-16, 24-25 depend from Claim 1 and Claims 31-32 depend from Claim 30. A dependent claim contains all the limitations for the claim from which it depends. See 35 U.S.C. § 112, ¶ 4.

The main difference between Claim 30 and Claim 1 is a rotor element and the production of an image of moving gasses. Claim 30's distinct elements read:

a rotor for rotating said flicker element
around said axis;

a screen having a partially reflecting surface
and a diffusing surface, wherein light
reflected from said rotating flicker element

onto said diffusing surface produces an image which resembles moving gasses from a fire; and

a simulated fuel bed positioned adjacent to said partially reflecting surface . . . wherein the image of moving gasses appears to emanate between the simulated fuel bed and its image on the screen.

'580 at col. 8, ll. 15-32. For purposes of the anticipation analysis, terms that appear in claim 30, which are similar to those of Claim 1, are defined in the same manner as construed by the Court in its Claim Construction. See *Epcon Gas Sys., Inc. v. Bauer Compressors, Inc.*, 279 F.3d 1022, 1030-31 (Fed. Cir. 2002).

In its summary judgment motion for invalidity, CFM argues that the '580 patent was anticipated by European Patent No. EP 0 611 921 A2 (the "'921 patent" or "'921"). The '921 patent discloses an "[a]pparatus for simulating flames or a solid fuel fire" and was filed with the European Patent Office on August 24, 1994. Noel O'Neill, an employee of the Glen Dimplex Group located in Ireland, was the inventor. The '921 patent also references British Patent No. GB A 1 272 644 (the "'644 patent" or "'644"), see '921 at col. 3, ll. 18-38, which discloses "Improvements in Apparatus for Producing Imitation Fire Effects" and was published in 1972.

Patents are presumed valid and CFM bears the burden of establishing invalidity by clear and convincing evidence. 35 U.S.C. § 282; *Beckson Marine, Inc. v. NFM, Inc.*, 292 F.3d 718, 725 (Fed. Cir. 2002). 35 U.S.C. § 102(b) covers anticipation and states that "[a] person shall be entitled to a patent unless . . .

the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States." To demonstrate that the '580 patent was anticipated by the prior art, CFM must show that the single prior art reference contains every limitation of the contested claims. *Trintec Indus., Inc. v. Top-USA Corp.*, 295 F.3d 1292, 1295 (Fed.Cir. 2002). Anticipation is a question of fact. *Atlas Powder Co. v. Ireco, Inc.*, 190 F.3d 1342, 1346 (Fed. Cir. 1999).

As a preliminary matter, neither party disputes that the '921 patent is a prior art reference published more than one year before the filing of the '580 patent.

A. Incorporation by Reference

Dimplex argues that '921 cannot anticipate Claims 1 and 30 and all dependent claims because '921 does not use a "flicker element having at least one reflective surface," '580 at col. 6, ll. 27-32 & col. 8, ll. 17-21, and as construed "a component part having at least one surface that reflects light in a wavering motion." (See Markman Order at 9-10). Dimplex points to the stationary "rear reflecting means" in Claim 1 of the '921 patent to demonstrate that this component only reflects light in a steady and non-wavering manner. '921 at col. 11, ll. 35-45. Dimplex also points to the "reflective material" in Claim 8 of the '921 patent that "reflect flashes of light onto the screen to simulate said sparks" to show

that the '921 patent lacks a flicker element that reflects light in a wavering motion. Id. at col. 12, ll. 29-31.

CFM does not put forth adequate evidentiary support to raise a genuine disputed question of fact as to Dimplex's contentions. CFM argues, however, that the required flicker element and wavering motion is disclosed in the '921 patent through incorporation of the '644 patent's "reflective paddle wheel." '921 at col. 3, ll. 18-38. In referring to the '644 patent, the '921 patent states that '644:

discloses an alternative way of trying to introduce colour into apparatus for producing imitation fire effects. In this case, a reflective paddle wheel, which is rotated by a motor, reflects light onto the rear of a screen or screens . . . which diffuses or reflects light rays emanating from a light source. A reflective surface, which is concave about a horizontal axis, is positioned behind the reflecting panels and screen. . . . Whilst this again may produce a reasonably satisfactory result, it is not an optimum effect. . . .

'921 at col. 3, ll. 18-38.

Dimplex counters that the '644 reference is only background art and cannot be considered in an anticipation analysis, which requires that the patent at issue be anticipated by a single prior art reference. Dimplex states that the issue of combining the '644 patent and the '921 patent is more appropriate under an obviousness analysis - 35 U.S.C. § 103, which was not brought by CFM on summary judgment.

The issue of incorporation by reference is a matter of law for the court to decide. *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1284 (Fed.Cir. 2000) ("[I]f incorporation by reference is at issue, the court must determine what material constitutes the single, prior art document.").

The Court is not limited to the preferred embodiment of the '921 patent and can look at patents incorporated by reference into the original patent. *Ultradent Prods., Inc. v. Life-Like Cosmetics, Inc.*, 127 F.3d 1065 (Fed. Cir. 1997). A single prior art reference can incorporate other documents by citing those documents with enough detail when describing the incorporated material so "that the material is effectively part of the host document as if it were explicitly contained therein." *Id.* at 1282. "To incorporate material by reference, the host document must identify with detailed particularity what specific material it incorporates and clearly indicate where that material is found in the various documents." *Advanced Display Sys.*, 212 F.3d at 1283.

Dimplex cites to cases that do not support its argument that the '644 patent reference is solely background art. Both *In re Bond*, 910 F.2d 831 (Fed. Cir. 1990), and *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226 (Fed. Cir. 1989), only state the well-established legal conclusion that every element of the claimed invention must be identically shown in a single prior art reference. *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991), does not exclude all

extrinsic evidence, but instead states that the single source rule does not preclude the use of extrinsic evidence to show what a reference's disclosure signified to one of ordinary skill in the art. See 1-3 Chisum on Patents § 3.02(d). The extrinsic evidence, however, may only be used "to explain but not expand the meaning of the reference." *Sunrise Med. HHG, Inc. v. AirSep Corp.*, 95 F. Supp. 2d 348, 451 (W.D. Penn. 2000).

The Court finds CFM's argument that the '644 patent reference is incorporated into '921 persuasive. CFM cites to *Celeritas Tech v. Rockwell*, which stated that "[a] reference is no less anticipatory if, after disclosing the invention, the reference then disparages it. Thus, the question whether a reference 'teaches away' from the invention is inapplicable to an anticipation analysis." 150 F.3d 1354, 1361 (Fed.Cir. 1998). The '644 reference clearly is not the preferred embodiment of the '921 patent, but as *Celeritas Tech* explains, the fact that the reference "teaches away" from the invention is not relevant to the anticipation question. See *id.* The '921 patent explicitly states that '644's reflective paddle wheel is an "alternative way of trying to introduce colour into apparatus for producing imitation fire effects." '921 at col. 3, ll. 18-20. The reference then goes on to explain, with particularity, the alternative mechanism itself. *Id.* at col. 3, ll. 20-38. The Court finds the detailed description of the reflective paddle wheel to be sufficient. Accordingly, the Court concludes that the detailed reference to

'644 reflective paddle wheel and no other part of the patent, as described above, is sufficiently explicit to incorporate the alternative mode to one reasonably skilled in the art as a matter of law.

B. Anticipation

The Court now turns to the anticipation analysis, which is a question of fact. *Atlas Powder Co.*, 190 F.3d at 1346. Although CFM must prove that the '921 patent anticipates the '580 patent by clear and convincing evidence because patent validity is presumed, the Court notes that "[w]hen an attacker . . . produces prior art or other evidence not considered [by] the PTO, there is, however, no reason to defer to the PTO so far as its effect on validity is concerned." *Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1359 (Fed. Cir. 1984). Because the prosecution history indicates that the '921 patent was not considered by the Patent and Trademark Office during the prosecution of the '580 patent, there is no requirement of deference to the PTO's decision.

"To anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim." *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001). To be arranged as in the same claim "every element of the claimed invention must be identically shown in a single reference." *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 677 (Fed.Cir. 1988). The description contained in the single prior art reference "must describe the applicant's claimed invention

sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it." In re Spada, 911 F.2d 705, 708 (Fed. Cir. 1990) (citing Akzo N.V. v. U.S. Int'l Trade Comm'n, 808 F.2d 1471, 1479 (Fed. Cir. 1986)). This requires that "[t]here must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." Scripps Clinic & Research Found. v. Genentech, Inc., 927 F.2d 1565, 1576 (Fed.Cir. 1991).

The crux of the anticipation analysis centers around the '644 patent's incorporation of the reflective paddle wheel. Both parties present credible evidence that disputes whether the '921 patent sufficiently describes the necessary elements of the claims at issue in the '580 patent. As each element of '580 is compared to the corresponding embodiment in '921, it becomes apparent that the interpretation is a matter of fact for the jury to decide.

CFM points out every element in Claims 1 and 30 and cites to expert testimony and other sources that indicate that when the alternative way of introducing color to create the impression of flames is added to the '921 specification, every element of the corresponding claims in the '580 patent are identically shown in '921. Dimplex contends, however, that the introduction of the reflective paddle wheel in replacing the curved reflector limitation would not allow for the single flag disclosed in '921 to cast moving shadows in front of the flame shapes that would have been created by the curved reflector of '921, and that CFM has not

proved that it would produce the required flame images by clear and convincing evidence. Dimplex also contends that Claims 30-32 of the '580 patent recite that the light reflected from the rotating flicker element in connection with the diffusing screen produce the appearance of moving gasses from a fire, but that the '921 patent is silent as to any mechanism that creates an image that resembles moving gasses, leaving an absent limitation. Therefore, '921 cannot anticipate Claims 30-32. Dimplex has raised disputed facts regarding the flame simulating assembly, flicker element, and resultant images that question the requirement that the elements be arranged in the same way.

The question remains one of fact: Do patents '921 and '644 by reference embody all the elements of Claims 1 and 30 and their dependents? The record is not so clear as to support Dimplex's contention that a reasonable juror could not possibly conclude that the elements of '921 are in the same arrangement to function in the identical way as the elements in claims 1 and 30 of the '580 patent. CFM's Motion for Summary Judgment of Invalidity by Anticipation is therefore **DENIED**.

V. INEQUITABLE CONDUCT

CFM asserts the affirmative defense of unenforceability. Dimplex moves for summary judgment of inequitable conduct on four grounds: (1) the Hamilton Beach fireplace as prior art; (2) the electric log set as prior art; (3) the '921 patent application as prior art; and (4) joint inventorship. Unenforceability and

inequitable conduct are treated as interchangeable for purposes of this summary judgment motion.

A. Inequitable Conduct: Grounds 1 - 3

To establish the defense of inequitable conduct, CFM must prove (1) the existence of material prior art; (2) Dimplex's knowledge of the prior art and its materiality; and (3) Dimplex's failure to disclose that prior art with intent to mislead the U.S. Patent and Trademark Office (the "PTO"). *Fox Indus., Inc. v. Structural Preservation Sys.*, 922 F.2d 801, 803 (Fed. Cir. 1991). The underlying elements of this defense must be proven by clear and convincing evidence during the application process of the asserted patent. *Abbott Labs. V. TorPharm, Inc.*, 300 F.3d 1367, 1379-80 (Fed. Cir. 2002).

A threshold level of intent to mislead the PTO and a threshold level of materiality must be established. *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1357-58 (Fed. Cir. 2003). If established, then the court will balance the actual levels of intent and materiality to determine whether, as a matter of equity, inequitable conduct has occurred. *Duro-Last, Inc. v. Custom Seal, Inc.*, 321 F.3d 1098, 1109-10 (Fed. Cir. 2003). "Applicants for patent, including their legal representatives, have the duty to prosecute patent applications in the PTO with candor, good faith, and honesty." *Life Techs., Inc. v. Clontech Labs., Inc.*, 224 F.3d 1320, 1324 (Fed. Cir. 2000). With respect to materiality, a prior art reference need not be submitted to the PTO if the information

is cumulative of other information before the PTO. 37 C.F.R. § 1.56(b); *Upjohn Co. v. Mova Pharm. Corp.*, 225 F.3d 1306, 1312 (Fed. Cir. 2000). CFM must also prove the intent to mislead by clear and convincing evidence; mere negligence or even gross negligence is not sufficient. See *Kingsdown Med. Consultants, Ltd. v. Hollister, Inc.*, 863 F.2d 867, 876 (Fed. Cir. 1988), cert. denied, 490 U.S. 1067 (1989). Dimplex argues that CFM cannot prove the intent and materiality element of this defense.

1. Hamilton Beach Unit Fireplace

CFM argues that Dimplex's failure to disclose a commercialized Hamilton Beach fireplace sold in the United States resulted in inequitable conduct before the PTO. Dimplex acknowledges that it had the Hamilton Beach unit in its possession. However, Dimplex contends that the unit did not need to be disclosed to the PTO because it was not material and merely cumulative art. Dimplex argues that the unit is a commercial embodiment of U.S. Patent No. 4,965,707 (the "'707 patent"), which was disclosed to the PTO. An uncited reference is cumulative or less material if "the most pertinent prior art in the field was . . . before the examiner." *Halliburton Co. v. Schlumberger Tech. Corp.*, 925 F.2d 1435, 1440 (Fed. Cir. 1991). The '707 patent is disclosed several times in the '580 patent specification as incorporated by reference and is therefore highly material. See '580 at col. 3, ll. 57-59; col. 4, ll. 26-27. If the Hamilton Beach unit is cumulative of the '707 patent, then the unit is less material and need not be disclosed

because the most pertinent prior art would be that actually referenced in the specification of the '580 patent.

The Court agrees with the undisputed evidence that the Hamilton Beach fireplace uses the Optiflame technology from the '707 patent. CFM argues that there is no evidence to demonstrate that the Hamilton Beach unit is licensed for the Optiflame technology, but CFM fails to point to any evidence in the record that disputes Dimplex's contrary evidence. When prosecuting a patent, an applicant need not also submit all physical embodiments of disclosed patent references if the information is cumulative. See *Elk Corp. of Dallas v. GAF Bldg. Materials Corp.*, 168 F.3d 28, 31 (Fed. Cir. 1999). Further, CFM has not provided any evidentiary support that points to a threshold intent to deceive regarding this product. Accordingly, the Court **GRANTS** Dimplex's Summary Judgment Motion on Inequitable Conduct as to the Hamilton Beach fireplace.

2. Electric Log Set

CFM also argues that Dimplex should have disclosed the existence and details of an electric log set provided to the inventors by another Dimplex employee. CFM contends that the electric log set was material because it disclosed a flicker element with petals that had a reflective surface.

Dimplex acknowledges receipt of the log set, but states that it was cumulative prior art of U.S. Patent No. 3,699,697 (the "'697 patent") and U.S. Patent No. 1,164,143 (the "'143 patent"). The '697 patent discloses a flicker element situated within a log set

that has a component with reflecting several surfaces that rotate to give a "flickering effect to simulated flames." '697 at col. 1, ll. 33-48. The '143 patent discloses a "rotatable light-reflecting element" that is formed by a "large number of individual light-reflecting vanes." '143 at col. 2, ll. 10-15. CFM fails to point to any evidence in the record that would raise an issue of fact as to the noncumulative nature of the electric log set. Again, the Court notes that Dimplex need not disclose a physical embodiment of an already disclosed patent if it is cumulative art. Further, CFM again has not provided any evidentiary support of a threshold intent to deceive regarding this product. Thus, the Court finds that CFM has not reached the threshold level of materiality and cannot prove that Dimplex failed to disclose material prior art with an intent to mislead. Accordingly, the Court **GRANTS** Dimplex's Summary Judgment Motion as to the Electric Log Set.

3. The '921 Patent Application

Dimplex did not disclose the '921 patent to the PTO when prosecuting the '580 patent application. The issue of the materiality of the '921 patent overlaps with the factual issues surrounding the anticipation analysis discussed above at Part IV.B, supra. Because the Court found that issues of fact remain on the anticipation issue, the Court cannot make a determination as to inequitable conduct on this issue. Accordingly, the Court **DENIES** Dimplex's Summary Judgment Motion on Inequitable Conduct for the '921 patent.

Once the jury makes a finding as to materiality and intent, however, it is the court's job to balance the elements and make a determination of whether inequitable conduct has been committed. See *Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1364 (Fed. Cir. 1984) ("The result of that balancing is obviously not a fact that may be found to exist or not, nor is it a mere matter of application of the law to the facts, both normal jury functions. It requires that judicial discretion be brought to bear, and the district court shall decide it."). The Court notes that on the intent requirement, CFM fails to point to direct evidence of intent to mislead. At best, intent to mislead could be inferred by Dimplex's attorney's negligence in failing to further investigate the documents received in connection with the '580 patent application. Those documents included a 1996 search report issued by the European Patent Office in connection with an EPO patent filing for Bitech and partial copy of a British application. Although the documents that Kristoffer Hess, an inventor of the '580 patent, and the attorney received were supporting documents to the '921 patent, CFM does not point to any evidence in the record that shows that those involved with the '580 patent application prosecution had any actual knowledge of the '921 patent application. See *Elk Corp. of Dallas*, 168 F.3d 28 (finding inequitable conduct on the basis of indirect or circumstantial evidence only when actual knowledge of withheld prior art shown by undisputed evidence or admissions); *Bristol-Myers Squibb v. Rhone-*

Poulenc Rorer, 326 F.3d 1226, 1239-40 (Fed. Cir. 2003) (evidence of actual knowledge undisputed); GFI, Inc. v. Franklin Corp., 265 F.3d 1268 (Fed. Cir. 2001) (actual knowledge of withheld prior art undisputed).

The Federal Circuit has emphasized that the challenged "conduct must be sufficient to require a finding of deceitful intent in the light of all the circumstances." Kingsdown Med. Consultants, 863 F.2d at 873. In light of this scant evidence on intent, the materiality of omitting the '921 patent must be strong for "the scales [to] tilt to a conclusion that 'inequitable conduct' occurred." Critikon, Inc. v. Becton Dickinson Vascular Access, Inc., 120 F.3d 1253, 1256 (Fed. Cir. 1997).

B. Joint Inventorship: Ground 4

CFM argues that Dimplex committed fraud upon the PTO because it did not name all the relevant inventors of the '580 patent. A patented invention may be the work of two or more joint inventors. See 35 U.S.C. § 116. CFM must prove that Dimplex omitted an inventor by clear and convincing evidence. See Bd. of Educ. v. Am. Bioscience, Inc., 333 F.3d 1330, 1337 (Fed. Cir. 2003). The inventors as named in an issued patent are presumed to be correct. Cannon Computer Sys., Inc. v. Nu-Kote Int'l, Inc., 134 F.3d 1085, 1088 (Fed. Cir. 1998). "An inventor under the patent laws is the 'person or persons who conceived the patented invention.'" Hoop v. Hoop, 279 F.3d 1004, 1007 (Fed. Cir. 2002) (quoting C.R. Bard, Inc.

v. M3 Sys., 157 F.3d 1340, 1352 (Fed. Cir. 1998)). Conception "is 'the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention . . . '" Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1228 (Fed. Cir. 1994) (quoting Hybritech, Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1476 (Fed. Cir. 1986)). One may not qualify as a joint inventor by "merely assisting the actual inventor after conception of the claimed invention." Ethicon, Inc. v. U.S. Surgical Corp., 135 F.3d 1456, 1460 (Fed. Cir. 1998) (emphasis added). Therefore, "critical question . . . is who conceived . . . the subject matter of the claims at issue." Id.

The inventors named on the '580 patent are Kristoffer Hess, David Miller MacPherson, and Ignazio Gallo (the "inventors"). The inventors sent a working prototype of their invention to Arthur Purton and Noel O'Neill at the Bitech division of the Glen Dimplex Group in Ireland. CFM contends that O'Neill should have been named as an inventor on the '580 patent.

The record indicates that O'Neill made two modifications and then returned the prototype to the inventors. The evidence clearly shows that one of the modifications regarding the positioning of the flame effect element was not used. This is evident from the testimony of the inventors and from examining the specifications of the '580 patent. Even if the modifications that O'Neill made were incorporated into the invention, the record is clear that O'Neill did not contribute to the conception of the invention. See

Chirichillo v. Prasser, 30 F. Supp. 2d 1132, 1138 (E.D. Wis. 1998) (stating that "an invention need not be at a commercially satisfactory phase of development in order for conception to be complete"). O'Neill's own deposition shows that his suggestions do not rise to a level of contribution entitling him to the status of co-inventor.

CFM fails to point to any evidence in the record that indicates any communication or cooperation by O'Neill with the inventors of the '580 patent before he received the working prototype. Further, nothing in the record suggests that O'Neill knew about the '580 patent invention until the inventors sent him the prototype. It is undisputed that before O'Neill ever made any suggested modifications, the prototype already existed. Moreover, CFM fails to argue joint inventorship in its opposition brief. Therefore, the Court finds that even when considering the facts in the light most favorable to CFM, CFM cannot prove that O'Neill was an unnamed inventor by clear and convincing evidence. Accordingly, the Court **GRANTS** Dimplex's Motion for Summary Judgment as to Joint Inventorship.

V. CONCLUSION

For the reasons stated herein, the Court hereby:

1. **DENIES** Dimplex's partial motion for summary judgment of infringement;

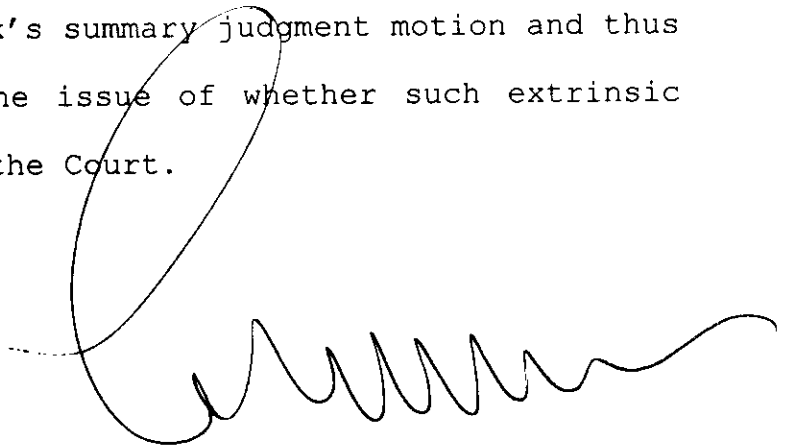
2. **GRANTS** Dimplex's motion for summary judgment on inequitable conduct regarding the Hamilton Beach electric fireplace unit, the electric log set, and on the issue of joint inventorship;

3. **DENIES** Dimplex's motion for summary judgment on the '921 patent;

4. **DENIES** CFM's motion for summary judgment of invalidity; and

5. The Court also denies as moot CFM's motion to strike Dimplex's Exhibits 12 and 21-23 submitted in supporting memoranda. The Court did not find it necessary to rely upon these exhibits for purposes of evaluating Dimplex's summary judgment motion and thus it does not need to reach the issue of whether such extrinsic evidence was properly before the Court.

IT IS SO ORDERED.



Harry D. Leinenweber, Judge
United States District Court

Dated:

February 8, 2005